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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,268	11/13/2001	James M. Kates	22645-7085	2619

7590 09/07/2006

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EXAMINER

NI, SUHAN

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/008,268

Applicant(s)

KATES, JAMES M.

Examiner

Suhan Ni

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,30-44,60-62,67 and 68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-40 and 60-62 is/are allowed.
- 6) ☒ Claim(s) 2-3, 41-44 and 67-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group **Art Unit 2615**.
2. A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission for RCE filed on 6/16/2006 has been entered.
3. This communication is responsive to the amendment filed on 06/16/2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 2-3 and 67 are rejected under 35 U.S.C. 102(e) as being anticipated by Schaub et al. (U. S. Pat. - 6,370,255).

Regarding claim 67, Schaub et al. disclose a hearing aid, comprising: a microphone (1) for providing an input signal; a signal processor (Fig. 2) adapted to process said input signal and provide an output signal; and a transducer (10) for delivering said output signal to a user, wherein said signal processor is adapted to generate a frequency warped signal from said input

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signal and to process said frequency warped signal according to a hearing impairment correction signal processing algorithm frequency scale; and an output conversion means adapted to convert said output signals to an audio output (10) as claimed.

Regarding claim 2, Schaub et al. further disclose the hearing aid, wherein said at least one signal processing function further comprises a plurality of cascaded all-pass filters (11).

Regarding claim 3, Schaub et al. further disclose the hearing aid, wherein said warped frequency scale approximates a Bark scale (col. 5, lines 24-28) as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2-3, 41-44 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaub et al. (U. S. Pat. - 6,370,255).

Regarding claim 68, Schaub et al. may not clearly teach at least part of processing in a frequency domain as claimed. Since to fully or partially implement an analog processing circuit into DSP is well known in the art, it therefore would have been obvious to one having ordinary skill in the art at the time the invention was made to be motivated to fully or partially implement the analog processing circuit taught by Schaub et al. into a frequency domain processing, such as DSP as an alternate choice, in order to efficient and effectively provide hearing device.

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Regarding claims 41-44, Schaub et al. do not specially teach the type of hearing device as claimed. Since to customize or minimize a hearing device to fit or satisfy different users is well known in the art, it therefore would have been obvious to one having ordinary skill in the art at the time the invention was made to be motivated to configure the hearing device to a suitable hearing aid, such as BTE type as an alternate choice, in order to optimally provide the hearing device for different users.

Allowable Subject Matter

6. Claims 30-40 and 60-62 are allowed.

Response to Amendment

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(571)-272-7505**, and the number for fax machine is **(571)-273-7505**. The examiner can normally be reached on Monday through Thursday from 10:00 am to 8:00 pm. If it is necessary, the examiner's supervisor, **Sinh N. Tran**, can be reached at **(571)-272-7564**.

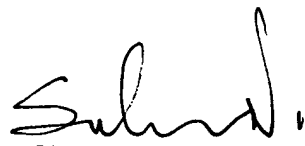
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600, or please see <http://www.uspto.gov/web/info/2600>.

September 2, 2006


SUHAN NI
PRIMARY EXAMINER